

ing," he writes. "Everything carries back the mind to a remote age; to a time when Cicero and Virgil were hardly known in Italy; to a time compared with which the time of Politian and even the time of Petrarch is modern." As a Latinist he must mention the "very badness of the rhyming monkish hexameters;" while confessing that "there is something attractive to me" in this "very badness" — as there is also in the "queer designs and false drawing of the pictures." The final comment of this busy brain is of special interest. After "an hour spent in making out" the Biblical histories of the atrium, the historian concludes: "They amused me as the pictures in very old Bibles used to amuse me when I was a child."

The future peer of Rothley dipped into a vast number of books in his omnivorous-reading, boyhood days. It seems a safe inference that some at least of his "very old Bibles" were of the Cotton type or model which furnished in the thirteenth century the designs for the Genesis and Exodus mosaics of the atrium of San Marco — and doubtless also for general Bible illustration of the day.

CRITICAL NOTES ON THE EASTERN SUBSPECIES OF *SITTA CAROLINENSIS* LATHAM.

BY HARRY C. OBERHOLSER.

THE name *Sitta carolinensis carolinensis* is now applied to the White-breasted Nuthatch of the northeastern United States and southeastern Canada. Recent investigation, however, shows that the Florida form must be called *Sitta carolinensis carolinensis*; and since none of the names for eastern birds of this species is found to be available for the northeastern race, the latter must be given a new designation. Therefore the eastern races of *Sitta carolinensis* will stand as below:

***Sitta carolinensis carolinensis* Latham.**

[*Sitta*] *carolinensis* LATHAM, Index Ornith., I, 1790, p. 262 (America, Jamaica) (based principally on *Sitta carolinensis* Brisson, Ornith., III, 1760, p. 596, from Carolina and Jamaica; which in turn is founded chiefly on Catesby's *Sitta capite nigro*, Nat. Hist. Carolina, Fla., and Bahama Is., I, 1753, p. 22, pl. 22, from Carolina).

Sitta carolinensis COVERT, in Chapman's History Washtenaw Co., Michigan, 1881, p. 175 (*nomen nudum*: = errore pro *Sitta carolinensis* Latham).

Sitta melanocephala VIEILLOT, Nouv. Dict. d'Hist. Nat., XXXI, 1819, p. 336 (nom. nov. pro *Sitta carolinensis* Latham).

Sitta carolinensis atkinsi SCOTT, Auk, VII, April, 1890, p. 118 (Tarpon Springs; Florida).

Sitta carolinensis RIDGWAY, Bulletin U. S. Nat. Mus., No. 50, part III, 1904, p. 443 (Covert MS.) (in synonymy; nom. nov. pro *Sitta carolinensis* Latham).

Sitta atkinsi litorea MAYNARD, Records of Walks and Talks with Nature, VIII, No. 1, January 12, 1916 (January 13, 1916), p. 5, pl. [1] (New River, North Carolina).

CHARS. SUBSP.—Size small; upper parts dark-colored; lower parts soiled white or shaded with grayish; female with black of head usually not overlaid with plumbeous.

MEASUREMENTS.¹—Adult male: wing, 87.3, tail, 44.6, culmen, 18.5; tarsus, 18.4; middle toe without claw, 15.6. Adult female: wing, 86.3; culmen, 18; tarsus, 18; middle toe without claw, 15.7.

TYPE LOCALITY.—Mouth of the Savannah River, South Carolina.²

GEOGRAPHIC DISTRIBUTION.—Southeastern United States: north to North Carolina, Tennessee, Kentucky, southern Indiana, southern Illinois, and southeastern Missouri; west to western Arkansas and eastern Texas; south to southeastern Texas, Louisiana, Mississippi, Alabama, and Florida; and east to the Atlantic coast from Florida to North Carolina.

Remarks.—The *Sitta carolinensis* of Latham³ was based chiefly on the *Sitta carolinensis* of Brisson,⁴ of which the habitat was given as Carolina and Jamaica; and on Catesby,⁵ whose bird came from Carolina. As this species does not occur in Jamaica, the American Ornithologists' Union Committee⁶ very properly re-

¹ Average in millimeters of ten specimens of each sex, taken from Ridgway, Bulletin U. S. Nat. Mus., No. 50, part III, 1904, p. 444.

² Here for the first time definitely designated.

³ Index Ornith., I, 1790, p. 262.

⁴ Ornith., III, 1760, p. 596.

⁵ Nat. Hist. Carolina, Fla., and Bahama Is., I, 1753, p. 22, pl. 22.

Check-List North Amer. Birds, ed. 3, 1910, p. 345.

stricted the type locality to Carolina. For the present purpose of fixing more definitely the type region of *Sitta carolinensis*, we here designate the mouth of the Savannah River in South Carolina as the type locality, a region which Catesby is known to have visited. The name *Sitta carolinensis* must, therefore, apply to the form to which the birds from South Carolina belong. Mr. Robert Ridgway¹ has referred these to the race from the northeastern United States, which has hitherto commonly passed as *Sitta carolinensis carolinensis*. A careful examination of a satisfactory series from South Carolina shows that the birds from this region are, in both size and color, decidedly nearer the Florida subspecies, hitherto called *Sitta carolinensis atkinsi*;² so that, unless three forms be recognizable, the bird from South Carolina must belong to the same subspecies as that from Florida.

Mr. C. J. Maynard has recently described a new subspecies of *Sitta carolinensis* from the New River in southeastern North Carolina as *Sitta atkinsi litorea*.³ His type, taken by himself on November 24, 1903, has, through his courtesy, been examined in the present connection, and found to measure as follows: wing, 87 millimeters; tail, 46; exposed culmen, 15.5; tarsus, 18.3; middle toe without claw, 15.5. In color and other characters it is identical with birds from South Carolina, hence his name must in any consideration, fall as a synonym of *Sitta carolinensis carolinensis* Latham. Mr. Maynard also proposes to recognize three forms of the White-breasted Nuthatch in the eastern United States.⁴ *Sitta carolinensis carolinensis* of the northeastern United States; *Sitta atkinsi atkinsi* from Florida; and *Sitta atkinsi litorea* Maynard from the coast region of North Carolina, South Carolina, and Georgia. The specific distinctness of *Sitta atkinsi* Scott from the form of *Sitta carolinensis* occurring in the northeastern United States, hitherto called *Sitta carolinensis carolinensis*, cannot be maintained, as may readily be ascertained by an examination of specimens from all parts of the range of these birds; in fact, the birds from South Carolina and Georgia, which Mr. Maynard calls a

¹ Bulletin U. S. Nat. Mus., No. 50, part III, 1904, pp. 441-443.

² *Sitta carolinensis atkinsi* Scott, Auk, VII, April, 1890, p. 118.

³ Records of Walks and Talks with Nature, VIII, No. 1, January 12, 1916, p. 5, pl. [1].

⁴ Records of Walks and Talks with Nature, VIII, No. 1, January 12, 1916, pp. 5-7.

subspecies of the Florida form, are really intermediates between the latter and the bird from the northeastern United States. Furthermore, none of the characters which separate the Florida race from that of the northeastern United States are entirely constant. Therefore, whether two or three forms be recognized, it is evident that all must be considered races of one species. The two forms commonly regarded valid — a northern and a southern subspecies — interdigitate over a wide area in such a perplexing manner that it would be exceedingly difficult to characterize an intermediate race; and this consideration, based on a careful examination of specimens from the entire eastern range of *Sitta carolinensis*, shows that it is not satisfactory to recognize three forms of the species; hence the name *Sitta carolinensis atkinsi* Scott becomes a synonym of *Sitta carolinensis carolinensis* Latham.

The *Sitta melanocephala* of Vieillot¹ is simply a renaming of *Sitta carolinensis* Latham, and as such becomes a synonym of the latter. The *Sitta carolensis* of Covert² is merely a *lapsus calami* or misprint for *Sitta carolinensis* Latham, and is, besides, a *nomen nudum*. Mr. Ridgway, however, in his synonymy of *Sitta carolinensis*³ has given it status as a synonym of *Sitta carolinensis* Latham.

Birds from South Carolina, the type region of *Sitta carolinensis carolinensis*, are slightly larger and very slightly paler than birds from Florida, and have, in the female, usually more suffusion of plumbeous on the pileum; but, as already noted, are very much nearer this form than to that of the northeastern United States. Birds from Tennessee, Kentucky, southern Indiana, southern Illinois, southeastern Missouri, western Arkansas, and eastern Texas are intermediate between the Florida bird and that from the northern United States, but are on the whole to be referred to the former.

Specimens from the following localities, all of which may be regarded as breeding records, have been examined in the present connection:

¹ Nouv. Dict. d'Hist. Nat., XXXI, 1819, p. 336.

² In Chapman's History Washtenaw Co., Michigan, 1881, p. 175.

³ Bulletin U. S. Nat. Mus., No. 50, part III, 1904, p. 443.

Alabama: Autaugaville; Squaw Shoals; Carlton; Ardell; Jackson; Orange Beach; Huntsville; Sand Mountain (9 miles west of Trenton, Georgia).

Arkansas: Van Buren.

Florida: Cousin's (Osceola County); Gainesville; Kissimmee; seven miles southwest of Kissimmee; twenty-four miles southwest of Kissimmee; Lake Arbuckle; Morgan Hole (De Soto County); Olney (Brevard County).

Georgia: No definite locality given.

Illinois: Parkersburg; Mt. Carmel.

Indiana: Wheatland; Knox County.

Kentucky: Lexington.

Louisiana: Belcher; Hackley.

Mississippi: Bay St. Louis.

Missouri: Willow Springs.

North Carolina: New River.

South Carolina: Wayne's Place (Christ Church Parish); Kershaw County; Georgetown; Mt. Pleasant; Chester; Lanes.

Tennessee: Rockwood.

Texas: Giddings.

Sitta carolinensis cookei, subsp. nov.¹

Sitta carolinensis carolinensis AUCT. nec Latham.

CHARS. SUBSP.— Similar to *Sitta carolinensis carolinensis*, but larger; upper parts lighter; lower parts more purely white; bill usually relatively less slender; and female with black of head usually overlaid with plumbeous.

DESCRIPTION.— Type, adult male, No. 558, Collection of W. W. Cooke; Washington, District of Columbia, May 23, 1904; W. W. Cooke. Pileum and cervix glossy black; upper parts carbon gray, the rump and upper tail-coverts paler; middle tail-feathers neutral gray; remainder of tail black with large white terminal or subterminal spots on the three outer feathers; wings fuscous black; the median, greater, and primary coverts, the inner webs of the two inner tertials, a subterminal streak on the inner web of outermost tertial, and the basal three-fourths of outer web of the same feather, black; the lesser wing-coverts, edgings to wing-coverts and quills, together with terminal portion of outermost tertial and outer webs of inner tertials, neutral gray, palest on the secondaries and inclined to whitish on the middle portion of some of the primaries; sides of neck opposite the jugulum, black, connecting with the black of the cervix; sides of head and anterior portion of sides of neck, together with lower parts, white (in the present specimen somewhat adventitiously soiled), the crissum mixed with

¹ Named for Professor Wells W. Cooke, in appropriate recognition of his services to ornithological science.

rather light chestnut; axillars white, anterior under wing-coverts black, posterior under wing-coverts white; thighs black, somewhat mixed with pale chestnut.

MEASUREMENTS.—Male:¹ wing, 92; tail, 46.9; culmen, 19.3; tarsus, 18.9; middle toe without claw, 15.7. Female:² wing, 89.1; tail, 45.8; culmen, 18.1; tarsus, 18.4; middle toe without claw, 15.7. Type (adult male): wing, 93.5; tail, 49; exposed culmen, 17; tarsus, 18.5; middle toe without claw, 15.5.

TYPE LOCALITY.—Washington, D. C.

GEOGRAPHIC DISTRIBUTION.—Northeastern United States and southeastern Canada: north to Newfoundland, southern Quebec, southern Ontario, northern Minnesota, and northern North Dakota, casually to northern Manitoba; west to middle North Dakota, eastern South Dakota, eastern Nebraska, central Oklahoma, and central northern Texas; south to central northern Texas, central Oklahoma, Kansas, northern Missouri, central Illinois, central Indiana, Ohio, West Virginia, and Virginia; and east to Atlantic coast of United States from Virginia to Newfoundland.

Remarks.—The best characters to separate this race from *Sitta carolinensis carolinensis* consist in its larger size, the darker coloration of its upper parts, and the usual plumbeous suffusion on the pileum of the female. The relatively shorter and stouter bill is a good average character, but so uncertain that it is of comparatively little value in the determination of individual specimens. The broader gray margins of wing-coverts and secondaries are largely a matter of season; and the lower parts are so often adventitiously stained from contact with the bark of trees that the color of these parts is not of much practical value in identifications. Birds of this race from Maryland and the District of Columbia are practically identical in color and size with those from the northern United States.

Specimens of *Sitta carolinensis cookei*, all of which may be regarded as breeding records, have, in the present connection, been examined from the following localities:

District of Columbia: Washington.

Illinois: Cook County; Jacksonville.

Kansas: Leavenworth.

Maryland: Laurel; Kensington; Montgomery County; Branchville; Finzell (6 miles north of Frostburg); Grantsville; Bittinger.

¹ Average in millimeters of 13 specimens.

² Average in millimeters of 16 specimens.

- Minnesota:** Fort Snelling.
Nebraska: Omaha; Douglas County; Florence.
New York: Suspension Bridge; Highland Falls; Canandaigua; Hunter.
Ohio: Circleville.
Oklahoma: Ponca Agency; Savanna.
Ontario: Lorne Park (Peel County); Lake of Bays.
Pennsylvania: Carlisle; Watsontown; Philadelphia; Chester County;
Erie; Newton Hamilton; Beaver; Leasuresville.
Rhode Island: Fort Adams.
Texas: De Leon.
Virginia: Falls Church (Fairfax County); Gainesville.
Wisconsin: Kenosha.

THE BREEDING OF THE BLACK-THROATED BLUE
WARBLER AT HATLEY, STANSTEAD COUNTY,
QUEBEC 1916.¹

BY H. MOUSLEY.

IN 'The Auk' for January and April, 1916 (Vol. XXXIII, pp. 57-73, 168-186) I have given the status up to the fall of 1915 of the seventeen different species of warblers I had so far discovered here. Of these, four are transients, and the remaining thirteen summer visitants, out of which latter number the nests and eggs of ten had actually been found, thus leaving only three to be accounted for viz.: The Black-throated Blue (*Dendroica caerulescens*), the Black-throated Green (*Dendroica virens*) and the Black-burnian (*Dendroica fusca*). Unfortunately I was prevented from doing any field work from May 10 to June 14, so that I missed the spring migration entirely, with the exception that on May 6, I saw a pair of Yellow Palm Warblers (*Dendroica palmarum hypochrysea*) on the little seventy-five acre farm, which in 1912 had given me my first and only record until the one just mentioned.

¹ Abstract of paper read before the Nuttall Ornithological Club, Oct. 2, 1916, by Dr. Chas. W. Townsend, for the author.